ABSTRACT

This invention provides bicyclic heterocycles that are useful for treating cell proliferative disorders, such as cancer and restenosis, as well as angiogenesis and atherosclerosis. We have now discovered a group of bicyclic compounds that are potent inhibitors of cyclin-dependent kinases (cdks), growth factor-mediated kinases, and non-receptor kinases. The compounds are readily synthesized and can be administered by a variety of routes, including orally, and have sufficient bioavailability for clinical use. This invention provides compounds of Formula I:

$$R^{1}-W$$
 Z
 R^{2}
 R^{2}
 R^{3}
 R^{3}
 R^{3}

10 where

20

5

Z is N or CH;

G is N or CH;

W is NH, S, SO, or SO₂,

R¹ includes phenyl and substituted phenyl,

15 R² includes alkyl and cycloalkyl,

 R^3 includes alkyl and hydrogen,

 ${\bf R}^{\bf 8}$ and ${\bf R}^{\bf 9}$ include hydrogen and alkyl, and the pharmaceutically acceptable salts thereof.

This invention also provides pharmaceutical formulations comprising a compound of Formula I together with a pharmaceutically acceptable carrier, diluent, or excipient therefor.